DOCUMENT RESUME

ED 114 671 CE 005 566

AUTHOR Alvir, Howard P.
TITLE Some Researchable Problems Together with Design Considerations, Sample Developmental Planning, Proposal Preparation Ideas, and Typical Project Management Considerations.
PUB DATE Nov 75
NOTE 25p.

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS *Educational Research; *Guidelines; Research Criteria; *Research Design; *Research Methodology; *Research Opportunities

ABSTRACT

The author makes suggestions for two types of educational research and offers guidelines for carrying out and writing up the research. His first suggestion is a topic for research: the development of an authoritative definition for three terms: (1) regionally identified demand for workers, (2) articulation between secondary curriculums and related curriculums at postsecondary institutions, and (3) influence of sex stereotyping in student selection of occupational programs. After statements of the purpose, the problem, and the need, the author lists the research questions, describes suggested methodology, and makes design and staffing suggestions. Anticipated time frames are given. The second research suggestion is an innovative format for the presentation of survey results, one which includes a self-evaluation rating and interpretive data. The nature of the instrument and data are explained, and a self-evaluation instrument ready for duplication and a self-rating key are provided. a sample comparative rating scale illustrates a reporting format. A criterion is outlined. (AJ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED114671

NOV 12 1975

CE

TITLE

SOME RESEARCHABLE PROBLEMS

SUBTITLE

Together with design considerations, sample developmental planning, proposal preparation ideas, and typical project management considerations

AUTHOR

Howard P. ALVIR, Ph.D.

27 Norwood Street
ALBANY, New York 12203

Date

November 1975

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

NO INSTITUTIONAL SPONSOR

CEOC5566

C O N T E N T S

	Page
INTRODUCTION	1
RESEARCH SUGGESTION I	2
Authoritative Definitions	
RESEARCH SUGGESTION II	8
An Innovative Format for a Final Report	
RELATED BIBLIOGRAPHY	23

INTRODUCTION

It is not unusual for a professional researcher to be asked the following question, "Where should I begin researching?"

This question is often accompanied by explanations such as, "We want to begin cutting our teeth on a problem that bears upon relevant issues. We want to do research that will directly impinge on the clients of education."

In order to respond to these demands, the following pages have been assembled.

These thoughts are presented to interested beginners who would like to undertake a DOable portion of valid research.

In many ways, these suggestions resemble brainstorming sessions. The typical reader will come to this publication looking for exact directions on what to do. After a few minutes of casual reading, some spark of creativity might be struck in the mind of the reader. This will motivate the reader to make a number of changes in order to make sure that the research undertaken meets local relevant needs.

There is nothing the matter with using this publication in such a manner. As a matter of fact, such innovative adaptation is much better than literally carrying out every procedure, design step, and suggestion found on the following pages.

RESEARCH SUGGESTION I

The topic of this research is the development of an authoritative definition.

Sometimes, there is litle need for a definition to be authenticated via a jury system. On the other hand, certain misuses give rise to the situation wherein clarity becomes essential.

This suggested research is presented in order to show how a research summary can be presented in four or five pages or less.

In developing research, it is necessary to get right to the point.

After the main point has been made, it is time to give supplementary details that will furnish examples and illustrations of exactly what is meant by the research. In addition, typical practical applications should be suggested so that readers will know what are the learner benefits and educational benefits involved.

Since every definition is to be considered the basis for further research, care should be given to what will take place after satisfactory definitions have been developed. In other words, further research implications must remain in the background of all definition type of research.

Once defined, the terms must be "put to work."

RESEARCH SUGGESTIONS BASED ON ACTIVITY 1a, FY 76 OCCUPATIONAL EDUCATION STATE PLAN

Purpose

The purpose of this research suggestion is to define clearly and authoritatively certain key terms used in occupational education planning, decision making, and budgeting. An authoritative definition is herein used as equivalent with a documented and verified definition. This documentation and verification will include current everyday use by occupational educators, the opinions of a qualified jury, and current (1975) available research.

The Research Problem

Poetry tells us that a rose by any other name would smell just as sweetly. Common sense tells us that when two people use the same term to refer to two entirely different concepts, operations, or values, misunderstanding is likely to cause a situation that doesn't smell as sweetly as a rose.

In scientific terminology, it is necessary to define clearly and authoritatively any term that is open to shades of difference in meaning or open to ambiguity.

Need for the Proposed Research

References to planning, organizing, and budgeting often contain the following three items:

"Meeting regionally identified demand for workers"

"Articulating secondary curriculums with related curriculums at postsecondary institutions"

"Minimizing the influence of sex stereotyping in student selection of occupational education programs"

Any use of the above three expressions that is not in conformity with an official definition, with popular usage, and with accepted scientific

Research Questions

Questions to be examined in the proposed research are:

1. What is meant by "regionally identified demand for workers"?
2. What is meant by "articulating" secondary curriculums with related curriculums at postsecondary institutions?
3. What is meant by minimizing the influence of "sex stereotyping" in student selection of occupational education programs?
4. What jury of judges is competent to render the above definitions and decisions?

Methodology

Occupational education legislation, state plans, policy statements, rules and regulations, research literature, periodicals, interoffice memos, computer printouts, microfiche, and other available resources will be reviewed to document specific instances of the use of each of the above terms; namely, "regionally identified demand for workers, articulation, and sex stereotypin

Simultaneous with the above activity, attention will be given to developing a jury of competent judges.

Before finalizing activity 1 above, a jury of judges should be specified according to criteria such as the following: "those selected should be unpaid volunteers who represent occupational educators, or occupational education decisionmakers, or one of the following groups:

a. Workers (employees)
b. Employers
c. Labor Department personnel
d. Women
e. Minorities
F. Unemployed."

After usage has been documented and a jury of judges assembled, a draft definition of the three terms will be proposed to the jury of judges in order to determine agreement or disagreement with the draft definition.

In light of the guidelines, decisions, and judgments rendered by the jury of judges, the draft definition of the three terms will be revised.

Suggested Design

In order to expedite the process of defining the three terms under investigation, the following design will be employed:

STEP 1: USAGE DOCUMENTATION will be performed in order to provide examples of how these three terms are used in everyday communication among occupational educators and occupational decision makers.

STEP 2: LEVEL OF USAGE ANALYSIS will be performed in order to develop a Likert scale ranging from inappropriate usage to appropriate usage as judged by the criteria of clarity, unambiguity, and meaningfulness of the communication in question.

STEP 3: VALIDITY ANALYSIS will be performed through the instrumentation of the jury of judges.

STEP 4: DISSEMINATION of the final definitions will be made to a wide audience of occupational educators and occupational education decision makers in order to determine how well such definitions are received in the field.

Staffing

The study will be conducted by research personnel. It is also expected that occasional participation of personnel from accrediting agencies will occur.

As far as anticipated personnel demands are concerned, the following should be noted:

1. Depending upon the availability of personnel, this study can be done by one or more individuals working together cooperatively.

2. Certain key priority activities, which do not consume a large amount of time, can be negotiated and developed by the investigator who would make the appropriate contacts with occupational educators and occupational education

decision makers concerned.

3. Routine clerical tasks will be performed by the clerical staff. No extraordinary clerical tasks are envisioned.

4. A large number of brief, but important contacts with significant personnel outside of school are anticipated to be a normal part of the daily activities of the personnel concerned with usage analysis.

Anticipated Time Frames

The following anticipated time frames refer to the steps completely described in suggested design.

The first column identifies the design step.

The second column identifies the design task.

The third column identifies the number of full-time work days required.

STEP	TASK	WORK DAYS REQUIRED
1	Usage documentation	20
2	Level of usage analysis	10
3	Validity analysis	10
4	Dissemination	10

RESUME

RESEARCH SUGGESTIONS

The following research suggestions are defining key terms:

1. The following terms should be defined to the satisfaction a jury of judges (to be specified):

   a. Regionally identified demand for workers
   b. Articulation between secondary curriculums and related curriculums at post-secondary institutions
   c. Influence of sex stereotyping in student selection of occupational education programs

2. Before finalizing activity 1 above, a jury of judges should be specified according to criteria such as the following: those selected should be unpaid volunteers who represent occupational educators, or occupational education decisionmakers, or one of the following groups:

   a. Workers (employees)
   b. Employers
   c. Labor Department personnel
   d. Women
   e. Minorities
   f. Unemployed

SUGGESTED RESEARCH II

Rather than present the results of a survey in the traditional format of a final report, this research study final report is presented in an innovative format.

The innovative format includes a self-evaluation rating and interpretive data.

The first three sections, PURPOSE, the SELF-EVALUATIVE INSTRUMENT, and INTERPRETIVE DATA explain the nature of the instrument and data.

The SELF-EVALUATIVE INSTRUMEN is ready for duplication and self-evaluation by agencies or programs so minded.

The SELF-RATING KEY indicates those answers to the self-evaluative instrument which measure up to the prespecified criteria of the program.

The COMPARATIVE RATING SCALE provides a sample of how to organize the rating scale in a simple presentation tha can be easily understood. It must be noted in this suggested research sample that the data contained in the COMPARATIVE RATING SCALE is presented as an illustration of a reporting format. The data used is strictly a series of randomly descending numbers shown to indicate how cumulative percentiles are the best way to present this data.

The section entitled CRITERION I is intended to be an outline rather than a complete statement. In this outline, many spaces are left that can be filled in according to the local interpretation and the requirements of the survey.

This suggested research is a practical way of using scholarly data in such a way as to interest the general reader and informed decision maker.

SELF-EVALUATION RATINGS FOR WORK EXPERIENCE PROGRAMS

Purpose

The purpose of this project is to develop a self-evaluation instrument and interpretive data that can be used by coordinators of a wide variety of work experience programs to develop a program self-evaluation rating and to compare the local program with similar programs.

The Self-Evaluation Instrument

The self-evaluation instrument is composed of fifteen questions to be answered by the work experience program coordinator. Each of these questions is based upon a criterion that constitutes an essential part of the definition of a cooperative education program. After answering the fifteen questions, the coordinator compares local answers with the fifteen criteria necessary for a cooperative education program in the strictest sense of the term. Depending upon how the fifteen questions have been answered, the coordinator is able to develop a rating of the local program.

This rating is expressed in terms of a number ranging from 0 to 15 with zero as low score.

In order to be termed a cooperative education program according to the standards established a score of 15 is required. By using this self-evaluation rating, the coordinator may find that a program termed cooperative education lacks one or more essential ingredients.

Interpretive Data

For each criterion of cooperative education programs, the following information is provided in the interpretation section:

CRITERION
DATA
EXPLANATION
SIGNIFICANCE
LEARNER BENEFITS
REMEDIATION
GROWTH

The CRITERION section provides a clear and concise statement of the criterion being interpreted.

The DATA section summarizes the results of a recent (FY-75) sampling of work experience programs. The data is divided into two main categories: cooperative education programs and non-cooperative education programs. Each of these two main categories is further subdivided into major city, BOCES, and other. For local comparisons, the coordinator will identify the local program as being either cooperative education or non-cooperative education. After this, the subcategory will be identified as major city, BOCES, or other. In this way, the data used for local comparisons will be based on data derived from comparable programs.

The EXPLANATION section gives an explanation, description, and details of exactly what is meant by the criterion under interpretation.

The SIGNIFICANCE section presents a variety of legal, educational, or occupational considerations that underline the importance of the criterion under explanation.

The LEARNER BENEFITS section pinpoints specific advantages that students can derive from a work experience program containing the criterion under consideration.

The REMEDIATION section shows what can be done to remedy the situation by a program that doesn't currently satisfy a specific essential criterion of cooperative education.

The GROWTH section shows what can be done for even more progress by a program that currently satisfies a specific essential criterion of cooperative education.

FOR DISCUSSION PURPOSES, samples of the following are available :

THE SELF-EVALUATION INSTRUMENT

THE SELF-RATING KEY with which to score the self-evaluation instrument

COMPARATIVE RATING SCALE (statewide results in cumulative percentages according to six subgroups) ILLUSTRATIVE DATA ONLY. (not real data!!!)

CRITERION 1 (Explained) (Illustrative Format)

SELF-EVALUATION INSTRUMENT

DIRECTIONS:

Answer the following questions in the space provided.

I. Indicate the type of curriculum or sequence in which this program is offered. (Check all appropriate items).

a. Occupational or Vocational..... ☐

b. Academic..... ☐

c. Industrial Arts..... ☐

d. Guidance/Career Education..... ☐

II. Indicate the major objective of the program. (Check one item only).

a. Career orientation work experience preceding occupational training..... ☐

b. General education concerning the world of work in a community..... ☐

c. Training for an entry level job leading to [illegible]career..... ☐

d. Providing students an income to remain in school and/or continue an education..... ☐

e. Other*..... ☐

*Specify: _____

_____

_____

III. Indicate the wage status of program participants. (Check one item only).

a. Participants receive less than minimum wage..... ☐

b. Participants receive minimum wage..... ☐

c. Participants receive more than minimum wage..... ☐

IV. Indicate the nature of insurance protection for program participants. (Check one item only).

a. Provided by employer through compensation..... ☐ (1)

b. Provided by school through a liability protection plan..... ☐ (2)

c. Provided by employer under protection plan for volunteers..... ☐ (3)

d. Not provided..... ☐ (4)

	Yes	No
V. Has this program received State approval?.....	☐(1)	☐(2)

If yes, specify the departmental unit of the State which granted approval.

_____

VI-VII. Indicate the units of credit offered per year for work experience and related instruction. (Check boxes in appropriate column).

	Units of Credit Per Year						
	½	1	1½	2	2½	3	No Credit Offered
VI. Work Experience	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)	☐(6)	☐(7)
VII. Related Instruction	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)	☐(6)	☐(7)

VIII. Which of the following describe the training agreements between schools and employers? (Check all appropriate items).

a. Formal written training agreements..... ☐

b. Informal verbal agreements..... ☐

c. No agreements..... ☐

IX-X. Which of the following perform regular formal evaluation of participants? (Check all appropriate items).

a. Employer..... ☐

b. Advisory committee..... ☐

c. Student participants..... ☐

d. Coordinator..... ☐

e. Teachers..... ☐

f. Administrators..... ☐

g. Other*..... ☐

*Specify: _____

_____

XI. Indicate the type of advisory group which assists in the development, operations, and evaluation of the work experience program. (Check all appropriate items).

a. General advisory council..... ☐

b. Special curriculum advisory committee..... ☐

c. No council or committee..... ☐

XII. Indicate the most appropriate descriptor concerning the jobs in which program participants are working. (Check one item only).

a. All jobs are directly related to in-school occupational instruction offered prior to or concurrently with placement..... ☐ (1)

b. Most jobs relate to in-school occupational instruction..... ☐ (2)

c. All jobs are exploratory in nature and/or offer general educational or career education benefits..... ☐ (3)

d. Most jobs are exploratory in nature and/or offer general educational or career education benefits..... ☐ (4)

e. Jobs do not relate to school curriculum..... ☐ (5)

XIII. Indicate the plan for scheduling in-school related instruction in this program. (Check all appropriate items).

a. Five regular class periods per week for one year provided by school district..... ☐

b. Five regular class periods per week for two years provided by school district..... ☐

c. One - ½ day period per week for one year provided by BOCES..... ☐

d. Two - ½ day periods per week for one year provided by BOCES..... ☐

e. Not offered..... ☐

XIV. Which of the following is most descriptive of the program coordinator's job title? (Check one item only).

a. Full-time coordinator..... (1)

b. Teacher/coordinator..... (2)

c. Department head supervisor..... (3)

d. Guidance counselor..... ☐ (4)

e. No program coordinator..... ☐ (5)

f. Other*..... ☐ (6)

*Specify: _____

_____

XV. Indicate if the coordinator is certified in any of these areas. (Check all appropriate items).

a. Academic..... ☐
b. Industrial Arts..... ☐
c. Occupational..... ☐
d. Guidance..... ☐
e. Administration..... ☐
f. No certification..... ☐

CITY: _____

TITLE: _____

I	YES	NO	Occupational curriculum	4.	A	B	C	D				
II	YES	NO	Entry level career job	5.	A	B	C	D	E			
III	YES	NO	Paid employment	7.	A	B	C					
IV	YES	NO	Employer compensated insurance	11.	A	B	C	D				
V	YES	NO	State approved	12.	YES	NO						
VI	YES	NO	Regular credit (work experience)	13A (WE)	1/2	1	1½	2	2½	3		
VII	YES	NO	Regular credit (related instruction)	13A (RI)	1/2	1	1½	2	2½	3		
VIII	YES	NO	Formal written training agreement	16.	A	B	C					
IX	YES	NO	Regular formal employer evaluation	22.	A	B	C	D	E	F	G	
X	YES	NO	Regular formal coordinator evaluation									
XI	YES	NO	Advisory groups	25A	A	B	C					
XII	YES	NO	Directly related to instruction	28.	A	B	C	D	E			
XIII	YES	NO	Scheduled related instruction	33.	A	B	C	D	E			
XIV	YES	NO	Program coordinator	35.	A	B	C	D	E	F		
XV	YES	NO	Certified coordinator	37.	A	B	C	D	E	F		

	Yes	No
TOTAL		

% Yes _____ %

The ABOVE

SELF-RATING KEY can be used to rate the local program.

If one of the choices underlined has been circled by the local program evaluator, then circle yes.

Add up the number of YES and NO answers.

The number of yes ratings gives the TOTAL RATING.

Criteria for Cooperative Education

Assuming a local program is Cooperative Occupational Education, the following criteria should be present:

CRITERION I (Refers to question #4 of survey and characteristic #3):

The type of curriculum or sequence in which this program is offered must be occupational.

CRITERION II (Refers to question #5 of survey and characteristic #4):

The major objective of the program must be training for an entry level job leading to a career.

CRITERION III (Refers to questions #7 & #9 of survey and charateristics #7, #8, and #9):

The wage status of program participants must be such that participants are gainfully employed, that is, paid for services rendered.

CRITERION IV (Refers to question #11 of survey and characteristic #11):

The insurance protection for program participants must be provided by the employer through compensation.

CRITERION V (Refers to question #12 of survey and characteristic #12):

The program must apply for and receive State approval from the Office of Occupational Education.

CRITERION VI (Refers to question #13A of survey and characteristics #13 and #14):

Credit must be offered for work experience and/or regular related instruction.

CRITERION VII (Refers to question #16 of survey and characteristic #20):

The training agreements between schools and employers must be formally written.

CRITERION VIII (Refers to question #22 of survey and characteristic #26):

Regular formal evaluation of participants must be performed by the employer and/or the coordinator.

CRITERION IX (Refers to question #25 of survey and characteristic #29):

Any Cooperative, Vocational, or Occupational Education program must organize and consult a local advisory council or committee.

CRITERION X (Refers to question #28 of survey and characteristic #32):

All of the jobs in which program participants are working must be directly related to in-school occupational instruction offered prior to or concurrently with placement or related instructions if training is all on the job.

CRITERION XI (Refers to question #33 of survey and characteristic #37):

Regularly scheduled related instruction must be offered by some plan.

CRITERION XII (Refers to question #35 of survey and characteristic #39):

The program must have a regularly assigned coordinator able to insure the execution of the above criteria.

CRITERION XIII (Refers to question #37 of survey and characteristic #41):

The program coordinator must be certified in occupational education.

f i c t i o n a l
COMPARATIVE RATING SCALE

ILLUSTRATIVE DATA

NOT REAL DATA

If this data were real, it would mean that

A - 81% of all COOP programs in BIG CITIES had all 15 criteria achieved

B - 74% of all COOP programs in BOCES achieved 14 criteria

C - 87% of all COOP programs in other areas achieved 13 criteria

COOPERATIVE RATING SCALE
RESULTS IN
CUMULATIVE PERCENTAGES

	COOPERATIVE			OTHER THAN COOPERATIVE		
Rating Scale	Big City	BOCES	Other	Big City	BOCES	Other
15	81 A	72	80	73	74	75
14	85	74 B	85	74	76	76
13	90	75	87 C	76	77	77
12	100	85	90	77	78	79
11	100	90	95	79	80	81
10	100	100	97	80	81	82
9	100	100	100	85	87	84
8	100	100	100	90	90	85
7	100	100	100	95	94	90
6	100	100	100	100	95	93
5	100	100	100	100	100	95
4	100	100	100	100	100	100
3	100	100	100	100	100	100
2	100	100	100	100	100	100
1	100	100	100	100	100	100
0	100	100	100	100	100	100

Criterion

The type of curriculum or sequence in which this program is offered must be occupational.

Data

According to a recent (FY75) survey, the following percentages indicate the presence of this criterion in each of the following six categories:

1A. Cooperative programs in big cities

1B. Cooperative programs in BOCES

1C. Cooperative programs in other geographical areas

2A. Other than cooperative programs in big cities

2B. Other than cooperative programs in BOCES

2C. Other than cooperative programs in other geographical areas

For ease of data interpretation, these percentages are arranged in the following format:

DATA ON CRITERION I

	COOPERATIVE	OTHER THAN COOPERATIVE
Big Cities	1A XX%	2A XX%
BOCES	1B XX%	2B XX%
Other than Big Cities or BOCES	1C XX%	2C XX%

Explanation

Having this curriculum or sequence in occupational or vocational education instead of academic education means that _____

_____

Having this curriculum or sequence in occupational or vocational education instead of industrial arts means that _____

_____

Having this curriculum or sequence in occupational or vocational education instead of guidance/career education means that_____

_____

Importance

It is important that the type of curriculum or sequence in which this program is offered is occupational because:

A. _____

_____

B. _____

_____

C. _____

_____

When the type of curriculum or sequence in which this program is offered is occupational, the following learner benefits result:

A. _____

_____

B. _____

_____

C. _____

_____

Remediation

Whenever a program does not meet the vocational or occupational emphasis of criterion I, the following remediation may be undertaken:

A. _____

_____

B. _____

_____

C. _____

_____

Growth

Whenever a program meets the occupational or vocational emphasis demanded by criterion I, the following may be considered appropriate next steps in order to keep the program growing in response to relevant needs:

A. _____

_____

B. _____

_____

C. _____

_____